

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/666,255	09/22/2003	Masaharu Yokono	242294US2	9511
22850	7590 06/28/2005		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			BEATTY, ROBERT B	
	1940 DUKE STREET ALEXANDRIA, VA 22314		ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Et

		Application No.	Applicant(s)				
Office Action Summary		10/666,255	YOKONO, MASAHARU				
		Examiner	Art Unit				
		Robert Beatty	2852				
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
1)🖂	Responsive to communication(s) filed on <u>22 September 2003</u> .						
2a)□	This action is FINAL . 2b)⊠ This action is non-final.						
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
4)⊠	Claim(s) <u>1-15</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
) Claim(s) is/are allowed.						
· <u> </u>	Claim(s) <u>1-15</u> is/are rejected.						
· ·	Claim(s) is/are objected to.						
8)[]	8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers							
9) The specification is objected to by the Examiner.							
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority u	ınder 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
Attachment	R(s)						
1) Notic	e of References Cited (PTO-892)	4) Interview Summary	(PTO-413)				
	e of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da					
	nation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date	6) Other:	atent Application (FTO-132)				

Application/Control Number: 10/666,255

Art Unit: 2852

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1,4-8,11-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Ream '228.

Ream teach a color printing device comprising a plurality of print cartridges 42,43,44,45 comprising photosensitive drums, developing devices 32 and image exposure devices for forming latent images on the photosensitive drums so as to be developed with toner by the developing units. The developed color toner images are transferred to an intermediate transfer belt 20. The transfer belt comprises a home position mark 75 on the belt, drive and follower rollers 40,54,41 and transfer rollers 50.53 for transferring the developed color toner images onto the intermediate transfer belt. The intermediate transfer belt is removable as a unit from the printing device and has a memory storage unit 80 as an EEPROM located thereon. Upon detecting that the transfer belt unit is installed in the printing device the controller of the printer will be put into communication with the storage memory 80 (col.1, lines 44-46). The memory will have velocity profiles for velocity correction and belt tracking profiles that will correct for differences in the position and color

Application/Control Number: 10/666,255

Art Unit: 2852

registration of the transferred images (col.3, line 41 col.4, line 12). Mark detectors 70.71 will be used to correct for the belt positional deviations.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 2-3 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ream '228 in view of Kataoka.

Ream taught supra discloses most of what is claimed except for using more than one reference mark on the transfer belt for correcting positional and color registration. Kataoka teach an printing apparatus which corrects for positional deviations (mis-registration) of color images by using a plurality of reference marks (see Fig.4) detected by detectors 10a, 10b. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a plurality of reference marks to correct positional deviations because correction can occur continuously rather than once per revolution of the belt which would improve registration accuracy.

Application/Control Number: 10/666,255 Page 4

Art Unit: 2852

3. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure.

Boothe et al., Ream '897, Kobayashi (JP), and JP 08-204900 all teach more

transfer belt registration correction methods.

4. Any inquiry concerning this communication or earlier communications from

the examiner should be directed to Robert Beatty whose telephone number is (571)

272-2130. The examiner can normally be reached on M-F from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Arthur Grimley, can be reached on (571) 272-2136. The fax

phone number for the organization where this application or proceeding is assigned

is (703) 872-9306. Any inquiry of a general nature or relating to the status of this

application or proceeding should be directed to the receptionist whose telephone

number is 703-308-1782.

Robert Beatty

Primary Examiner

North Deats

Art Unit 2852